

FIG. 1

| Time Frame Index | Percentage of Difference |
|------------------|--------------------------|
| 5                | 0.0-2.5                  |
| 4                | 2.5-5.0                  |
| 3                | 5.0-7.5                  |
| 2                | 7.5-10.0                 |
| 1                | 10.0-12.5                |
| 0                | Above 12.5               |

FIG. 2A

42

44

Velocity Rating Table

| Time Domain Index | Time Frame Index |      |      |     |     |      |
|-------------------|------------------|------|------|-----|-----|------|
|                   | 5                | 4    | 3    | 2   | 1   | 0    |
| 5                 |                  | <10% | —    | —   | —   | —    |
| 4                 |                  |      | <5%  | —   | —   | —    |
|                   |                  | >95% |      | <2% | —   | —    |
| 3                 |                  |      |      | <5% | —   | —    |
|                   |                  | >95% |      |     | <2% | —    |
| 2                 |                  |      |      |     | <5% | —    |
|                   |                  |      | >90% |     |     | <4%  |
| 1                 |                  |      |      |     |     | <10% |
| 0                 |                  |      |      |     |     | >10% |

22

FIG. 2B

Frequency Rating Table

| Frequency Index  | 5     | 4      | 3      | 2       | 1        | 0     |
|------------------|-------|--------|--------|---------|----------|-------|
| First Large Peak | 0-5%  | 5-10%  | 10-15% | 15-20%  | 20-25%   | >25%  |
| 0-50 Hz          | 0-10% | 10-20% | 20-30% | 30-40%  | 40-50%   | >50%  |
| 50-400 Hz        | 0-25% | 25-50% | 50-75% | 75-100% | 100-125% | >125% |
| 220-370 Hz       |       |        |        |         |          |       |
| 400-600 Hz       |       |        |        |         |          |       |

70

FIG. 3A

|    |                          |                        |               |                                    |                  |                            |
|----|--------------------------|------------------------|---------------|------------------------------------|------------------|----------------------------|
| 54 | Regions                  | 56<br>First Large Peak | 58<br>0-50 Hz | 60<br>50-400 Hz                    | 62<br>220-370 Hz | 64<br>400-600 Hz           |
|    | Calculations             | Magnitude              | Area          | Area                               | Area             | Area                       |
|    | Coefficients             | 1.0                    | 1.0           | 1.0                                | 1.0              | 1.0                        |
|    | Objectives to Evaluation | Low Frequency Accuracy |               | Majority Algorithm Effective Range | CAE Connections  | High Frequency Requirement |
|    | For Algorithms           | Vel. & Acc.            | Vel. & Acc.   | Vel. & Acc.                        | Acc.             | Acc.                       |

FIG. 3B

| Overall Table Index   |  |   |
|---|--|---|
| Rating Index  | Single Point Sensor System   | Advanced Restraint System                                   |
| Velocity  | Same as Velocity Rating Table  |   |
| Frequency   | Min (Max (First Large Peak, 0-50 Hz), 50-400 Hz) ①                         | 0.7 * (Max (First Large Peak, 0-50 Hz)) + 0.3 * (50-400 Hz) |
|   | Min (Max (First Large Peak, 0-50 Hz), 50-400 Hz, 220-370 Hz, 400-600 Hz) ② |   |
| Overall   | Min (Velocity, Frequency)  | 0.6 * Velocity + 0.4 * Frequency                            |
| Note: ① for Velocity Base and ② for Acceleration Base Algorithm |  |   |

FIG. 4

|    |   |        |                       |
|----|---|--------|-----------------------|
| 76 | Location                                      | Tunnel | Front Crash<br>Sensor |
| 78 | Zero Index Accumulation of<br>Velocity Rating | >20%   | >30%                  |
| 74 | Combination of Frequency Rating               | No     | No                    |
|    | Overall Rating                                | 0      | 0                     |

FIG. 5

| Index Table |       |   |
|-------------|-------|---|
| Index       | Level | Comments  |
| 5           | High  | CAE Will Be Used in Sensor Algorithm Calibration as Simulated |
| 4           | Low   | Test Condition.   |
| 3           | High  | CAE Will Be Used in Sensor Algorithm Calibration as One of    |
| 2           | Low   | the Test Variations.  |
| 1           | High  | CAE Will Be Used as Reference Only.                           |
| 0           | Low   |   |

FIG. 6





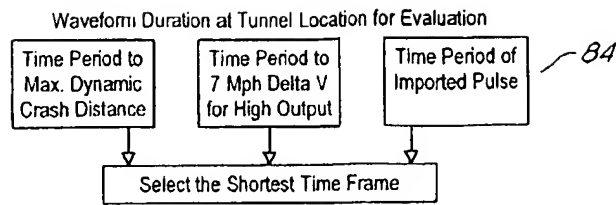


FIG. 7

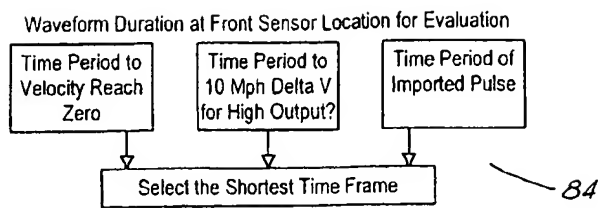


FIG. 8